UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

47604

P. O. BOX 9271

RESTON, VA 20195

7590

PIPER RUDNICK LLP

03/10/2005

03/10/2003

EXAMINER

NGUYEN, DAO H

ART UNIT

PAPER NUMBER

2818

DATE MAILED: 03/10/2005

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/750.850	01/05/2004	Byung Jin Ahn	P68311US1	2485

TITLE OF INVENTION: FLASH MEMORY CELL AND METHOD OF MANUFACTURING THE SAME, AND PROGRAMMING/ERASING/READING METHOD IN THE FLASH MEMORY CELL

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1400	\$300	\$1700	06/10/2005

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail

Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

(703) 746-4000 or Fax

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

indicated unless corrected maintenance fee notification	below or directed otherwise	in Block 1, by (a)	specifying a new co	rrespondence addre	swill be mailed to the curren ss; and/or (b) indicating a sep	parate "FEE ADDRESS" for	
	ICE ADDRESS (Note: Use Block 1 for 7590 03/10/2005	any change of address)		Fee(s) Transmittal. 7 papers. Each additio	of mailing can only be used This certificate cannot be used and paper, such as an assignmate of mailing or transmission.	I for any other accompanying nent or formal drawing, mus	
PIPER RUDNIC P. O. BOX 9271 RESTON, VA 20	•			I hereby certify that States Postal Service addressed to the M	ertificate of Mailing or Tran this Fee(s) Transmittal is being with sufficient postage for final ail Stop ISSUE FEE addres SPTO (703) 746-4000, on the	ng deposited with the United irst class mail in an envelope is above, or being facsimile	
						(Depositor's name)	
						(Signature)	
						(Date)	
APPLICATION NO.	FILING DATE	FI	IRST NAMED INVEN	OR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/750,850	01/05/2004		Byung Jin Ahn		P68311US1	2485	
TITLE OF INVENTION: THE FLASH MEMORY C	FLASH MEMORY CELL A	ND METHOD OF	MANUFACTURING	THE SAME, AND) PROGRAMMING/ERASIN	G/READING METHOD IN	
APPLN. TYPE	SMALL ENTITY	ISSUE FEE	E PU	BLICATION FEE	TOTAL FEE(S) DUE	DATE DUE	
nonprovisional	NO	\$1400	· -	\$300	\$1700	06/10/2005	
EXA	MINER	ART UNIT	CL.	ASS-SUBCLASS			
NGUYE	N, DAO H	2818		257-316000	_		
1. Change of correspondent CFR 1.363).	ce address or indication of "Fo	ee Address" (37		e patent front page,			
Change of correspon Address form PTO/SB/1	dence address (or Change of 22) attached.	Correspondence	or agents OR, altern	to 3 registered pat atively, ngle firm (having as	•		
"Fee Address" indica PTO/SB/47; Rev 03-02 Number is required.	ation (or "Fee Address" Indica or more recent) attached. Use	tion form e of a Customer	registered attorney	or agent) and the na attorneys or agents. I	mes of up to		
3. ASSIGNEE NAME ANI	O RESIDENCE DATA TO B	E PRINTED ON TH	IE PATENT (print or	type)			
PLEASE NOTE: Unles recordation as set forth i	s an assignee is identified be n 37 CFR 3.11. Completion	low, no assignee da of this form is NOT a	ata will appear on the a substitute for filing	e patent. If an assig an assignment.	gnee is identified below, the	document has been filed for	
(A) NAME OF ASSIGN	IEE	(B) 1	RESIDENCE: (CITY	and STATE OR CO	OUNTRY)		
	e assignee category or catego	ries (will not be print	ted on the patent):	Individual 🗆	Corporation or other private gr	oup entity Government	
4a. The following fee(s) are	enclosed:		Payment of Fee(s):		-		
☐ Issue Fee			A check in the ame				
Publication Fee (No small entity discount permitted)			Payment by credit card. Form PTO-2038 is attached.				
Advance Order - # of Copies			The Director is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).				
	(from status indicated above	_		· · · · · ·			
	MALL ENTITY status. See 3				ALL ENTITY status. See 37 C		
The Director of the USPTO NOTE: The Issue Fee and P nterest as shown by the rec	is requested to apply the Issu Publication Fee (if required) words of the United States Pate	e Fee and Publicatio vill not be accepted fi nt and Trademark O	n Fee (if any) or to re from anyone other tha ffice.	apply any previous n the applicant; a re	sly paid issue fee to the applications gistered attorney or agent; or t	ation identified above. he assignee or other party in	
Authorized Signature				Date			
				_	n No		
This collection of information application. Confidential abmitting the completed a his form and/or suggestions last 1450, Alexandria, Virg	on is required by 37 CFR 1.3 ity is governed by 35 U.S.C. oplication form to the USPTG for reducing this burden, shinia 22313-1450. DO NOT S	11. The information in 122 and 37 CFR 1.1 D. Time will vary decould be sent to the CEND FEES OR CO	is required to obtain of the control	or retain a benefit by estimated to take 12 dividual case. Any c icer, U.S. Patent and TO THIS ADDRES	the public which is to file (an minutes to complete, includir comments on the amount of ti d Trademark Office, U.S. Dep SS. SEND TO: Commissioner	d by the USPTO to process) ng gathering, preparing, and me you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450,	

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PTOL-85 (Rev. 12/04) Approved for use through 04/30/2007.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	PPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO. 2485		
10/750,850	01/05/2004		Byung Jin Ahn	P68311US1			
47604	7590	03/10/2005	EXAMINER				
PIPER RUDNICK LLP				NGUYEN	NGUYEN, DAO H		
P. O. BOX 9271 RESTON, VA 20195				ART UNIT	PAPER NUMBER		
				2818			
				DATE MAIL ED: 02/10/2005	•		

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571) 272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.